

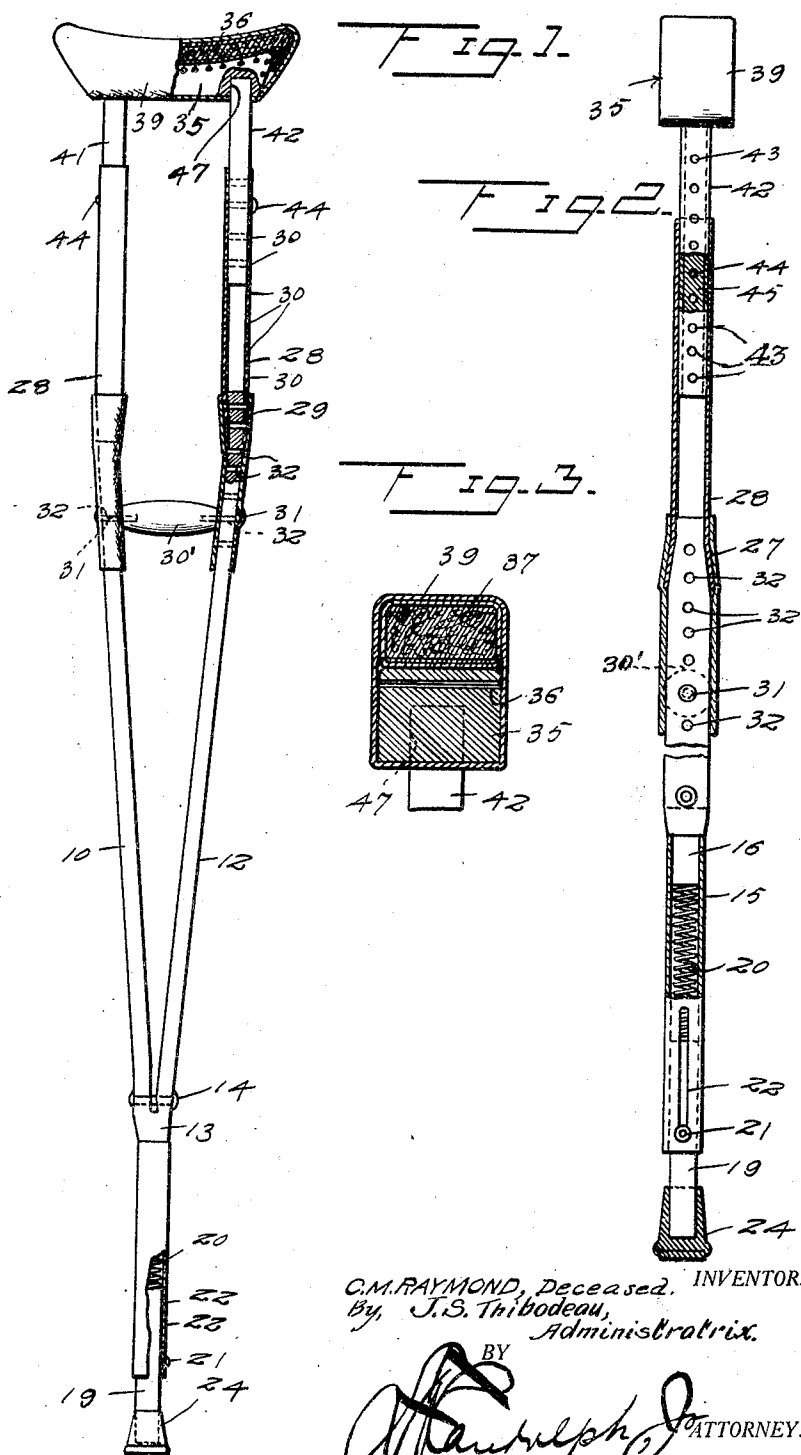
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C. M. RAYMOND

CRUTCH.

Filed Oct. 15, 1920



UNITED STATES PATENT OFFICE.

CADWALLADER M. RAYMOND, DECEASED, LATE OF SOMERVILLE, MASSACHUSETTS;
BY JULIA S. THIBODEAU, ADMINISTRATRIX, OF FALL RIVER, MASSACHUSETTS.

CRUTCH.

Application filed October 15, 1920. Serial No. 417,201.

To all whom it may concern:

Be it known that I, JULIA S. THIBODEAU, a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, administratrix of the estate of CADWALLADER M. RAYMOND, deceased, late a citizen of the United States, and resident of Somerville, Massachusetts, do hereby declare that the said CADWALLADER M. RAYMOND, deceased, invented certain new and useful Improvements in Crutches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a crutch, and more particularly to a crutch of adjustable length, permitting of the use of the article by persons of different heights, and obviating the necessity of making crutches in a great variety of sizes.

One object is to provide an article of the type indicated which shall include longitudinal members formed in telescoping sections, with means for connecting the sections when the desired adjustment has been secured, and retaining them in that position.

A further object is to provide a crutch, the longitudinal elements of which shall include tubular portions adapted to cooperate with an arm rest provided with tubular or other cylindrical elements, to be received within the tubular members first named.

A still further object is to provide a crutch which shall include a hand hold, adjustable with reference to the arm rest, with means effecting connection between the longitudinal members of the crutch, the hand hold, and the tubular members connected with the longitudinal elements.

A still further object is to provide a crutch having a resiliently mounted foot member, for cushioning purposes.

A still further object is to provide an arm rest including a packing element and a cover therefor, and means permitting the adjustment of the packing, and permitting the latter to be restored to proper position when misplaced through use.

With the foregoing and other objects in view the invention consists in the novel construction, combination and arrangement of

elements hereinafter described and claimed.

In the accompanying drawings:

Figure 1 is a perspective view of the crutch parts being broken away.

Figure 2 is a view in side elevation and longitudinal section, or vertical section.

Figure 3 is a view in side elevation of the arm rest and the tubular elements connected therewith, the cover being partly removed from the arm rest, for showing the arrangement of the packing.

The main vertical elements of the crutch are designated 10 and 12 and converge at or near the point 13, being there connected by means of transverse securing elements 14, or if desired a band may be placed thereon. The tubular member 15 may surround the lower integral portion 16, assuming that the crutch is formed in the usual manner by sawing the stock longitudinally for the greater portion of its length and separating the sawed portions by means of the hand hold.

The lower end of tubular portion 15 receives the foot member 19 resiliently mounted within the tubular portion by means of a spring 20, and the movement of these elements being limited by screw or pin 21 cooperating with the slot 22 located as indicated. The usual rubber tip 24 may be provided. The spring and the foot member form a shock absorber to the crutch to prevent jars or shocks to the physical and nerve system of a person.

The elements 10 and 12 are each provided with tubular members 28, the ends of which may be flattened as shown at 29 for cooperation with the correspondingly formed members 10 and 12.

The tubular portions 28 are apertured transversely, these openings being designated 30, and any suitable number being provided. The hand hold 30' is secured by means of screws or engaging devices 31, passing through apertures 32 in the elements 10 and 12.

The arm rest is designated 35 and is provided with transverse apertures 36 by means of which the padding 37 is secured in position, thread or the like being used in effecting this connection. This arrangement makes it possible to keep the padding in good condition, and to restore it to proper position in the event of displacement

through use. The cover for the arm rest is shown at 39 and is properly secured in any suitable manner.

The arm rest is provided with a pair of 5 tubular or other cylindrical elements adapted to cooperate with the tubular elements 28 before mentioned. These elements connected with the arm rests as shown at 41 and 42, are provided with transverse apertures 10 43 through which securing devices 44 pass, these devices also passing through the apertures in the elements 28. However, the tubular portions may have such frictional contact with each other that they will remain 15 in adjusted positions under the weight of a person thereby obviating the use of the securing devices 44. Since there is considerable strain on the elements 41 and 42 they may be reinforced by mounting therein 20 wooden stems 45 also provided with transverse apertures registering with those in the elements 41 and 42. These members last named and the wooden stems both enter sockets 47 formed on the arm rest, thereby 25 producing an especially effective construction.

The metallic portions are sufficiently strong for the purpose, but are of light weight, and but little weight is added to 30 the article as a whole, there being in fact practically nothing to distinguish the crutch from the usual article, so far as the appearance is concerned, but there is the very great advantage that the crutch is adjustable, and 35 not only makes it possible to fit practically

any individual, but the article is also effectively cushioned, and is in every way rendered convenient and comfortable. In this connection it should be added that at the joints between the tubular elements 28 and 40 the vertical members 10 and 12 flexible tubular coverings may be provided, in order to prevent the hand from coming into direct contact with the surfaces of the members referred to. 45

What is claimed is:—

A crutch having spaced staff sections, tubular members extending therefrom, a hand-hold intermediate the sections, means surrounding the upper ends of the sections and 50 the lower ends of the tubular members to secure them together, said means and ends having openings transversely therethrough, means selectively passing through the openings to adjustably secure the hand-hold in 55 place, said first named means being constricted at the upper end, an arm rest, rods depending from said arm rest and into and in telescopic relation with said tubular members, and fastening means adjustably 60 passing through the tubular members and rods.

In testimony whereof, I affix my signature in the presence of two witnesses.

JULIA S. THIBODEAU,

Administratrix of estate of Cadwallader M. Raymond, deceased.

Witnesses:

MINNIE F. CUNNEEN,
BESSIE F. COONEY.